

The invention claimed is:

1. A waterproof, moisture permeable composite film from 7 to 300  $\mu\text{m}$  in thickness and comprising a porous hydrophobic film having a coating layer of a hydrophilic resin produced on one face thereof; wherein said hydrophilic resin coating layer is a thin film having depth such that when an electron microscopic image of the surface of said hydrophilic resin coating layer taken at 10,000x magnification with an electron microscope is viewed with the naked eye, the contours of said porous hydrophobic film matrix are visible through said hydrophilic resin coating layer over at least a portion of said hydrophilic resin coating layer; and wherein pores present on the surface of said porous film on the side thereof having the coating layer are infiltrated by hydrophilic resin continuous with said coating layer, while the surface of said porous film on the side thereof devoid of coating layer is not infiltrated by said hydrophilic resin and retains a porous structure, such that the composite film has water vapor transmission of at least  $5000 \text{ g/m}^2 \cdot 24 \text{ h}$ .

2. The waterproof, moisture permeable composite film according to claim 1 wherein said hydrophilic resin infiltrates the interior of said porous hydrophobic film to a depth of from 5 to 30  $\mu\text{m}$ .

3. The waterproof, moisture permeable composite film according to claim 1 wherein said porous hydrophobic film is a porous polytetrafluoroethylene film.

4. The waterproof, moisture permeable composite film according to claim 1 wherein said porous hydrophobic film is a porous polytetrafluoroethylene film whose pore surfaces are coated with a water- and oil-repellant polymer.

5. The waterproof, moisture permeable composite film according to claim 1 wherein said hydrophilic resin is a hydrophilic polyurethane resin.

6. The waterproof, moisture permeable composite film according to claim 1 wherein said hydrophilic resin is a hydrophilic polyurethane resin containing dye or pigment.

7. A waterproof, moisture permeable laminate sheet comprising waterproof, moisture permeable composite film according to claim 1; and fabric laminated to the hydrophobic face thereof.

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$\frac{d}{dt} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$